

# Single Engine in the Gulf, No Problem

*By Lt. Dan Hughes*

Everything began normally on a routine night AIC hop in the Arabian Gulf. The weather was typical: a balmy 98 degrees Fahrenheit, with 100 percent humidity. The launch and the flight went according to the brief.

The real fun began after I had put my “landing hat” on. Shortly after checking into marshal and receiving my instructions, CATCC asked me to mark my position. After doing so, they requested I push from that position to speed the recovery. This procedure was common, so I continued inbound from 20 miles.

I checked in with approach while passing 5,000 feet, “Approach, 405. Platform.”

In her calm, yet alarming voice, Betty said, “Engine right. Engine right!”

Speed brakes in, decreasing my rate of descent, and obeying the minute-to-live rule were the first things on my mind, even though the ever-present engine cautions on my DDI still were patiently awaiting my full attention. While leveling off at 1,200 feet, I requested permission from approach to switch frequencies to my squadron CATCC rep. At this point, I was level at 1,200 feet, at 250 knots, and 8.5 miles out. Because I was close to the boat, I decided to keep the approach frequency in my primary radio and the rep in my auxiliary radio. Approach requested a climb to 2,000 feet and vectored me 90 degrees off the final bearing. Meanwhile, I was explaining to my rep that I now had a right-engine flameout. Fortunately, the motor still seemed to be turning.

As the rep talked me through the NATOPS procedures, I retarded the right throttle to the off

position. I noticed that to maintain level flight, I needed military power to min burner on the good engine. Next, approach called, “405, can you accept an approach from your current position?” You can probably imagine what my less-than-enthusiastic reply to that idea was. As I tried my best to tune out approach—except for any safety-of-flight calls—I again began going through the emergency procedures for a flameout. I cranked the right engine, and, thankfully, it spooled to 38 percent, which would provide adequate hydraulic power to the accessory-hydraulic systems.

Great, now I can lower my gear normally, but I won’t be able to raise my hook or use normal brakes in the landing area. Meanwhile, I was doing my best to adhere to the vectors approach had given. After going through the procedures and talking to approach, I dirtied up and said I would be doing a half-flap approach. I also noted I would need a tow to get out of the landing area.

As I entered the downwind pattern in the landing configuration, I again noticed it was taking min- to mid-range afterburner just to maintain level flight. By this time, approach was anxious to get me on deck and out of their hair. OK, landing checklist complete, gross weight at 32,700 pounds—I turned to final. At five miles, I received needles and called, “Up and right.” Approach concurred, and I proceeded on my mode 2, single-engine approach. As I neared glideslope and nosed over, I realized my sweet spot was going to be a very small range between mil- and min-burner. Boy, it just doesn’t get any better than this!

“405, at three quarters of a mile, on and on, call the ball,” approach called.

“405, Hornet ball, single engine, 4.4,” I replied.

Using min burner and left rudder, I managed to keep the needles relatively centered. Paddles must have seen the afterburner, because at “in the middle” to “in close,” he called, “Easy with it.” Typically, with an emergency, that is a cleared-to-land call—I landed uneventfully. As I got towed out of the landing area, I breathed a huge sigh of relief.

After investigating the flameout, our top-notch, two-time Golden-Wrench-award-winning maintenance department realized 405’s right-main fuel control had failed. The aircraft was repaired and flew the following day.

As everyone knows, hindsight is 20/20. I realized after landing that a bolter or waveoff, for any reason, would have been impossible. My aircraft’s gross weight and the extremely high temperatures in the Gulf caused a large reduction in available thrust. As the pilot in command, I allowed myriad things to paint me into a corner. Throughout our entire time in the gulf, we worked tank states, so I never really questioned my fuel state. Later, I learned the NATOPS recommended gross weight for landing, with the temperature that night, was 29,600 pounds. That means I would have had to jettison my external stores, which included two drop tanks, and I would have had to call the ball with a 1.5.

It is hard for a Hornet pilot to dump gas, but as one can see, it may be necessary. Otherwise, the call is to divert 150 miles, single-engine, with no way of knowing what caused your other engine to flame out. Per NATOPS, the best way to handle this particular situation would have been to jettison the external tanks and dump down to a 3.5 fuel state and establish the aircraft-handling characteristics before executing the approach. As the pilot in command, you should take time to evaluate all the factors and not rush to land, because you may get only one shot at the deck. 🦅

Lt. Hughes flies with VFA-87.



Photo by PH3 Carrie-Anne Gonzalez  
Retouched by Allan Amen

I realized after landing that a bolter or waveoff, for any reason, would have been impossible.